INSTALLATION MANUAL

Version 14.00 - June 2014

Multicam.LSM

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Regional Contacts

You will find the full list of addresses and phone numbers on the following webpage: http://www.evs.com/contacts.

User Manuals on EVS Website

The latest version of the user manual, if any, and other user manuals on EVS products can be found on the EVS download center, on the following webpage: http://www.evs.com/downloadcenter.

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What's New?

In the Multicam Installation manual, the icon NEW ! has been added on the left margin to highlight information on new and updated features in release 14.00.

General manual update for new major release 14.00

Visual Studio 2013 Redistributables for Gateway PC to be downloaded

- See section "General Upgrade Process" on page 5

M10 lines no longer supported

1. Prerequisites

Warning
Before you install Multicam 14 or upgrade to this software version, we suggest that you carefully read this guide and the corresponding release notes.

Requirements

Multicam 14 can only be installed on XT3, XS (4U or 6U), XTnano systems running with one of these MTPC revisions: A3/A6 (HS870 or HS873).

To be able to install Multicam 14, at least 256 MB of RAM is mandatory.

Generating the Installation Files

BAT Files

The installation files are delivered in a zip archive including two folders (Image & Install).

Two bat files are delivered with the zip archive. They allow you to generate the following installation files:

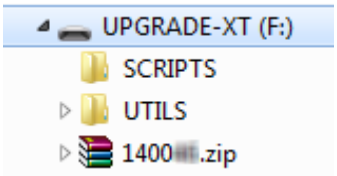
- The `Make XNet Install Zip.bat` file is to be used to generate a .zip installation file for installation from XNet Monitor.
- The `MakeUSB.bat` file is to be used to generate the installation files on a USB key for direct installation on the EVS server.

How to Generate the Installation Files on a USB Key

This method for generating installation files is used when you directly install Multicam on the EVS server.

To generate the installation files on a USB key, proceed as follows:

1. Extract the initial zip archive to a temporary folder on your windows PC.
2. Insert a blank USB key (256MB or larger) into the PC and check the letter drive assigned to the USB key.
3. In the temporary folder, double-click the `MakeUSB.bat` file and follow the instructions.
4. Indicate the drive letter assigned to the USB key.
5. The key is formatted and installation files are copied to the USB key.

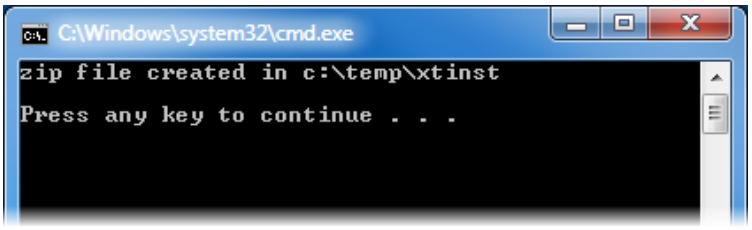


How to Generate the Installation Zip File

This method for generating installation files is used when you install Multicam from an XNet Monitor application.

To generate the installation zip file, proceed as follows:

1. Extract the initial zip archive file to a temporary folder on your windows PC.
2. In the temporary folder, double-click the `Make XNet Install Zip.bat` file.
3. When the installation zip file is created, the following message is displayed on the command prompt:



   The installation .zip file is stored on `C:\temp\xtinst`, and its name is made up of the current release, version and build numbers.

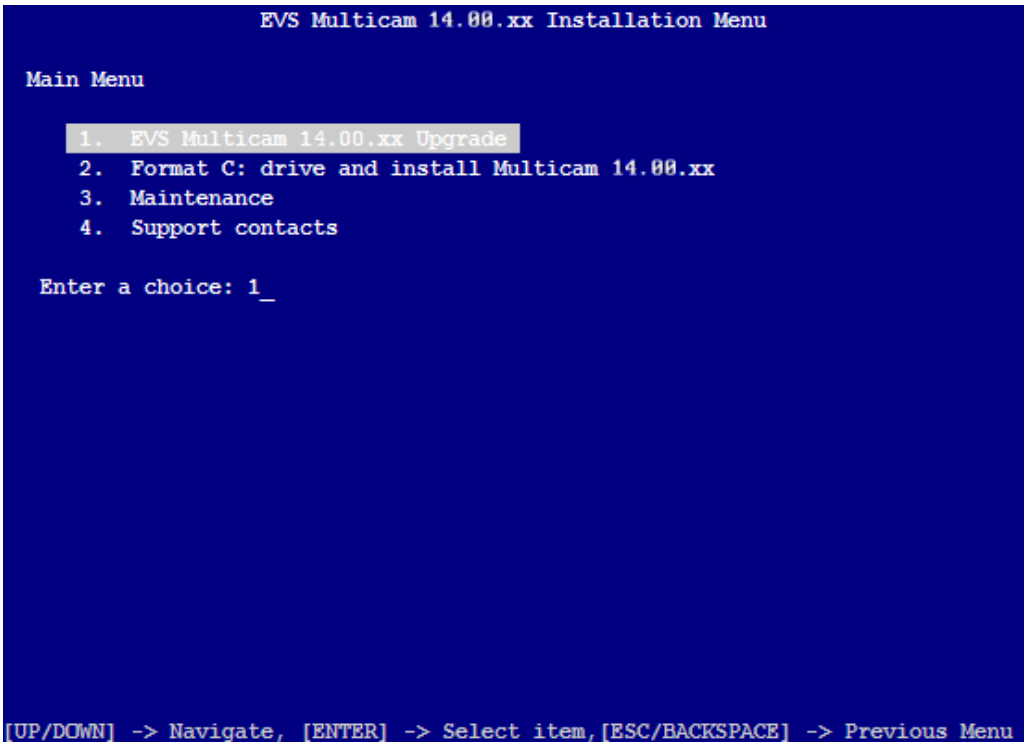
4. Copy the installation .zip file to the computer where XNet Monitor is installed, and from which you will install the Multicam application.

Refer to the XNet Monitor user manual for a detailed procedure for Multicam installation via XNet Monitor.

2. Installation on MTPC using a USB Key

2.1. Overview of the Installation Menu

To access the installation menu, you need to insert the USB key including the Multicam installer into the MTPC front panel of the EVS series server and reboot the system.


EVS Multicam 14.00.xx Installation Menu
Main Menu
1. EVS Multicam 14.00.xx Upgrade
2. Format C: drive and install Multicam 14.00.xx
3. Maintenance
4. Support contacts
Enter a choice: 1_
[UP/DOWN] -> Navigate, [ENTER] -> Select item,[ESC/BACKSPACE] -> Previous Menu

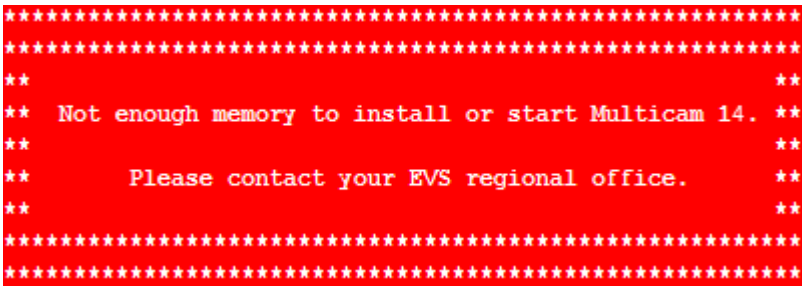
From the installation menu, four options are presented:

1. **EVS Multicam Upgrade:** This option means that only the core files of the Multicam 14 application will be copied to the system drive partition, and a process is used to migrate previous configuration files into the upgraded version.
2. **Format C: and Install Multicam:** This install option means a full formatting of the system drive partition will be performed, followed by a clean installation of Multicam 14.
3. **Maintenance:** This option allows the access to various support processes and tools such as BIOS reloading.
4. **Support Contacts:** This option provides contact information to EVS support offices.

2.2. Memory Check

Before starting the installation of Multicam 14, the system will check if enough memory is installed on the server. The system needs at least 256 MB of RAM.

If not enough memory is detected, the following message will be displayed:



2.3. EVS Multicam 14 Upgrade

2.3.1. General Upgrade Process

Introduction

For upgrading to a more recent version of Multicam, you need to select the first option in the Installation Menu: **EVS Multicam 14.XX.XX Upgrade**.

The upgrade is performed automatically. The total duration of the operation (upgrade Multicam + quad MTPC) is around 12 minutes.

Warnings

- When you upgrade to Multicam 14 for the first time and you want to keep clips recorded with a Multicam 12 or lower, you need to back up the clips with Xsquare prior to upgrading Multicam.
- During the installation of Multicam 14, the configuration lines will be converted to be compatible with Multicam 14.

A full installation process include the following steps. Some of the steps are optional and/or depend on the version previously installed:

1. check of current version (warning when you have to perform a clear clip after installation)
2. upgrade of Multicam
3. update of the MTPC BIOS
4. upgrade of the quad MTPC (when you upgrade to Multicam 14 for the first time)
5. notification to set a jumper for the VGA2TV adapter

The steps 1, 3, 4 and 5 are briefly explained in this section.

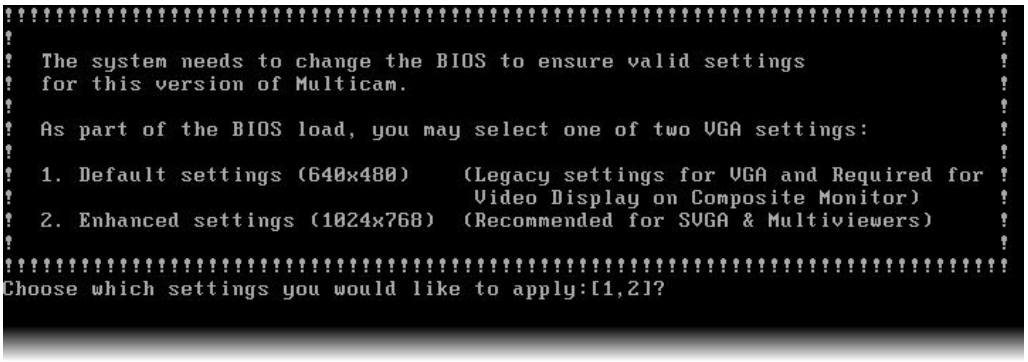
NEW !

Note

When you use a PC gateway, you need to install the redistributable packages for Visual Studio 2013 from the Microsoft Download Center. These are not included in the Multicam installation package.

Selection of MTPC BIOS Update Type

After the installation, an automatic update of the MTPC BIOS will be performed if needed. During this process the following dialog box will prompt you to choose between two options for configuring the VGA resolution.


The system needs to change the BIOS to ensure valid settings
for this version of Multicam.
As part of the BIOS load, you may select one of two VGA settings:
1. Default settings (640x480) (Legacy settings for VGA and Required for Video Display on Composite Monitor)
2. Enhanced settings (1024x768) (Recommended for SVGA & Multiviewers)
Choose which settings you would like to apply:[1,2]?

Activation of Composite Video Signal on VGA

After the MTPC BIOS update, a warning message will appear which reminds you to set a jumper on the MTPC if you use the VGA2TV adapter (i.e. ability to output the VGA as a composite video signal). If you do not use this adapter, this jumper change is not required.

WARNING
If you are using the VGA2TV Adapter, you MUST ensure that the
ENVS Jumper is PRESENT on the MTPC board when running Multicam 9!
Press any key to continue . . .

End of Installation Process

To complete the installation procedure, a dialog box will prompt you to remove the USB before rebooting the EVS server.

2.3.2. First Upgrade to Multicam 14

Warning
When you upgrade to Multicam 14 for the first time and you want to keep clips recorded with a Multicam 12 or lower, you need to back up the clips with Xsquare prior to upgrading Multicam.
If you have already performed the upgrade to Multicam 14, you need to restore the previous Multicam version installed (Multicam 12 or 11), back up the clips, and then restore the Multicam 14 version.

If you start Multicam 14 coming from a previous Multicam version without first clearing the video disks, you will receive an error message during startup:

NEW !

This message is followed by a more detailed explanation:

```
"Multicam failed to start.
The server will reboot automatically.
The cause of the problem may be:
- An upgrade of the Multicam version
- A hardware change
- A change in the multiple encoding configuration.

 A clear clip may solve the problem.

If the problem persists, please contact your EVS regional
office."
```

The startup procedure is interrupted and Multicam comes back to the setup screen.

From this screen, you can clear the video disks and restart your Multicam 14.

2.3.3. End of Upgrade Process

Installation with a USB Key

When you have started the upgrade from the Installation menu, the server upgrades the Multicam. When the upgrade is finished, you are asked to remove the USB key and restart the server.

During the restart, the quad MTPC will be upgraded. Once the upgrade is finished, the server continues to boot normally.

Installation with XNet Monitor

During the installation with XNet Monitor, your server will restart automatically then install the new version and open the window where you can launch a configuration line.

A warning message might appear on the screen:

The message asks you to power off/on the server. In this case, a simple reboot of the software is not enough, **you have to turn off/on the power switch**.

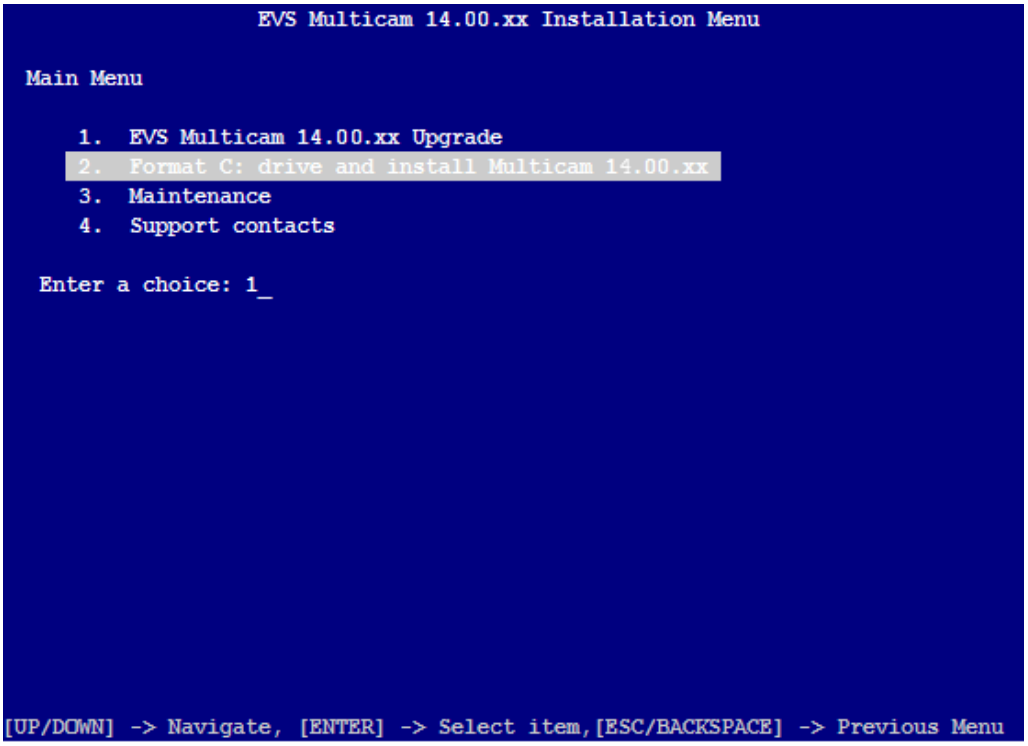
During the restart, the quad MTPC will be upgraded. Once the upgrade is finished, the server continues to boot normally.

2.4. Format C: Drive and Install Multicam 14

Introduction

When you install Multicam for the first time or when you want to erase all the content of the system drive partition and perform a full installation, you need to select the second option in the Installation menu: **Format C: and install Multicam 14.XX.XX**.

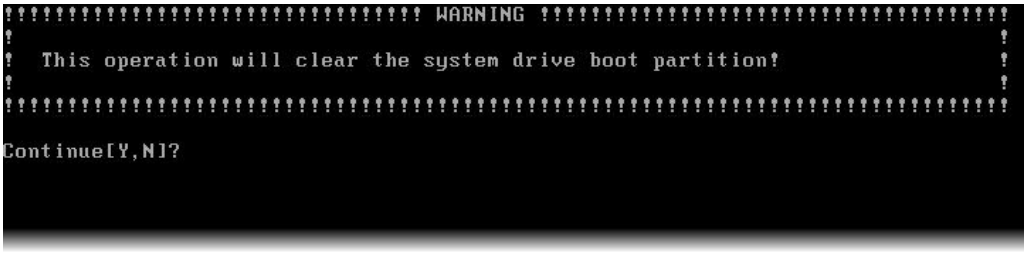
A full install starts by erasing all the contents of the system drive partition.


EVS Multicam 14.00.xx Installation Menu
Main Menu
1. EVS Multicam 14.00.xx Upgrade
2. Format C: drive and install Multicam 14.00.xx
3. Maintenance
4. Support contacts
Enter a choice: 1_
[UP/DOWN] -> Navigate, [ENTER] -> Select item,[ESC/BACKSPACE] -> Previous Menu

Besides the upgrade process itself, some additional actions are performed during installation, which generate messages and require a user input. The additional steps are described below and in section "General Upgrade Process" on page 5

Formatting of System Drive Partition

A second warning states that the system drive partition will be cleared during this operation.



Pressing **N** will cancel the operation and return to the installation menu if you have selected the option by mistake.

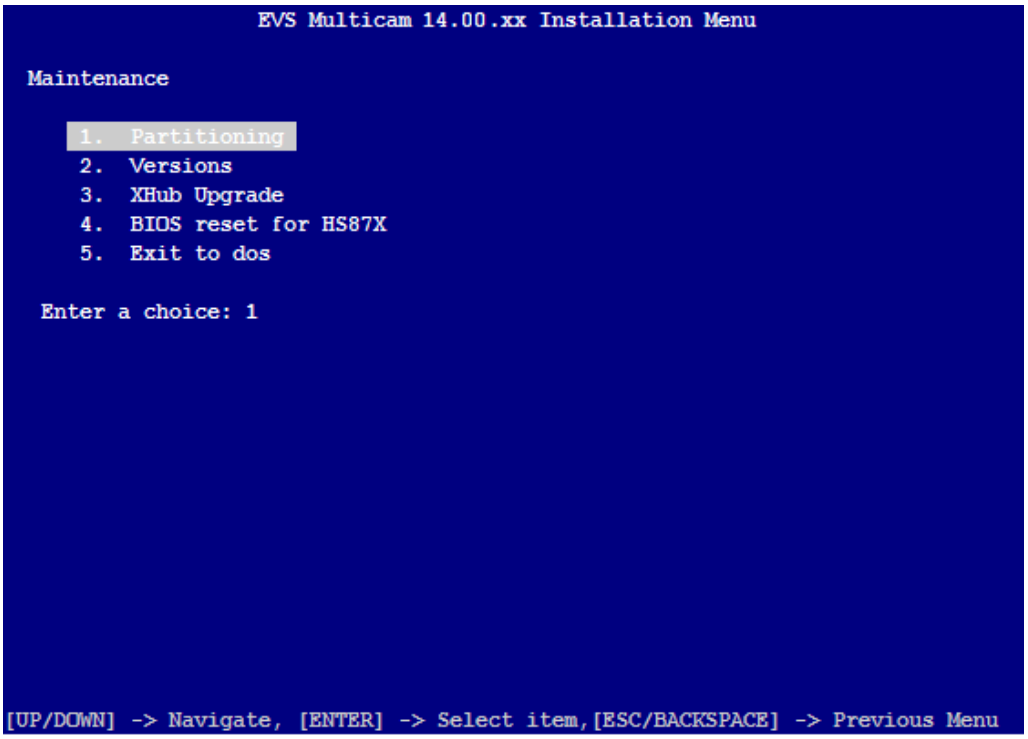
Pressing **Y** will proceed to the format of the drive before installing the Multicam 11.

From this point onwards, the installation follows the normal process described in the "General Upgrade Process" on page 5.

2.5. Maintenance Menu

2.5.1. Overview of the Maintenance Menu

From the Installation menu, the Maintenance option opens the following Maintenance menu. Refer to the next sections for more information on the various maintenance tasks.

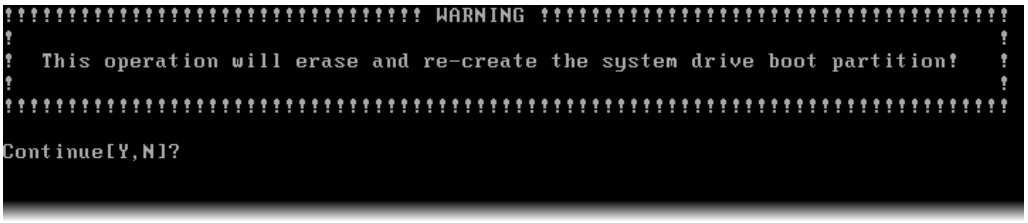

EVS Multicam 14.00.xx Installation Menu
Maintenance
1. Partitioning
2. Versions
3. XHub Upgrade
4. BIOS reset for HS87X
5. Exit to dos
Enter a choice: 1
[UP/DOWN] -> Navigate, [ENTER] -> Select item,[ESC/BACKSPACE] -> Previous Menu

2.5.2. Partitioning

Use this option only if you want to completely format the MTPC drive. This option removes all existing partitions and re-creates a new empty partition of 2GB in FAT16.

Consequently, you have to proceed to choice 2, which consists in formatting the system and eventually installing the Multicam application.

When you select the Partitioning option, the following warning message appears and invite you to confirm that you want to proceed to partitioning by typing **Y**.



2.5.3. Versions

Introduction

When you select the Versions option from the Maintenance menu, the Version window is displayed. As you can install up to five Multicam versions on the EVS server, you can manage these versions and delete one or more versions if needed. The Version window allows you to manage the Multicam versions installed on the EVS server.

The following options are offered and explained below:

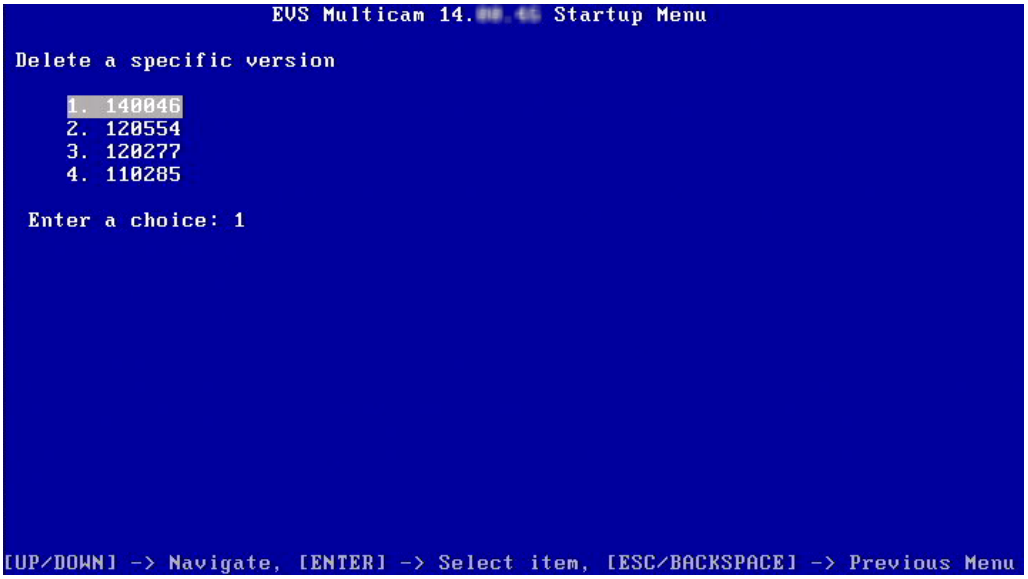
- Delete a Specific Version
- Delete all Versions

Highlight the requested option with the Arrow keys, then press **Enter** to either open a secondary window, or validate the action.

How to Delete a Specific Version

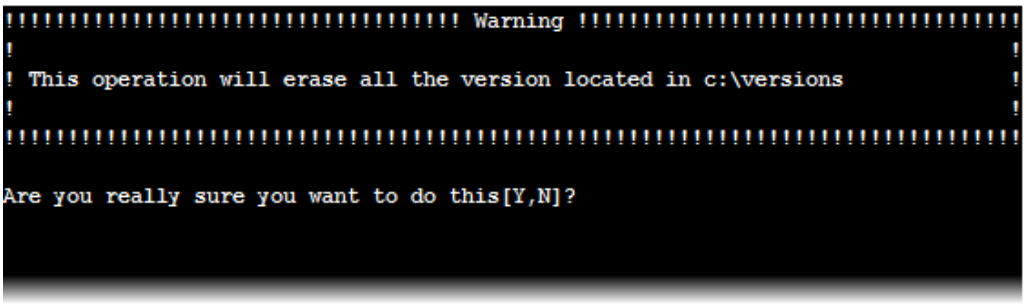
The **Delete a Specific Version** option in the Version menu allows you to remove one or more versions from the server.

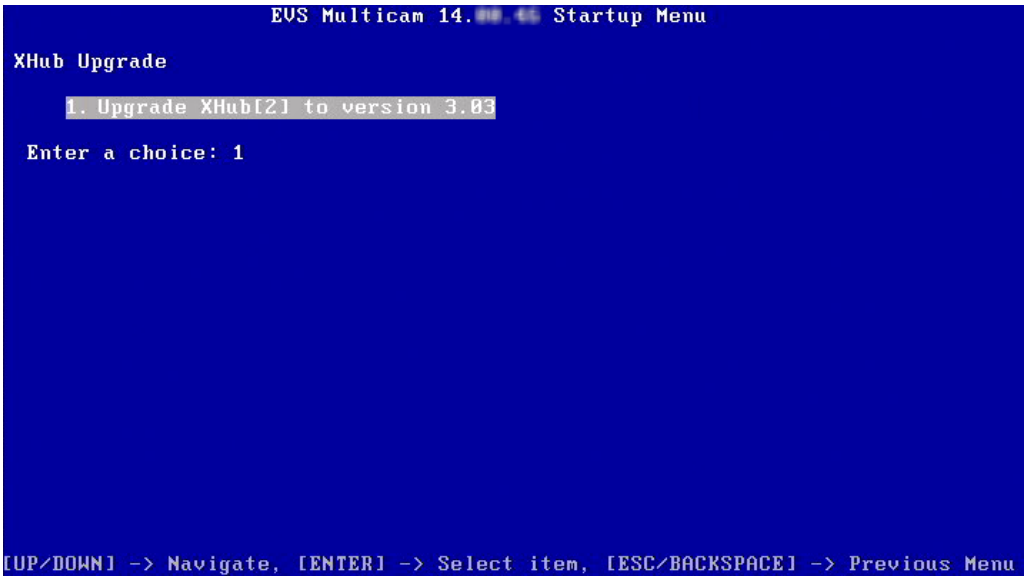
From the list of Multicam versions installed on the EVS server, highlight the version you want to delete using the Arrow keys, and press **Enter** to validate.



How to Delete All Versions

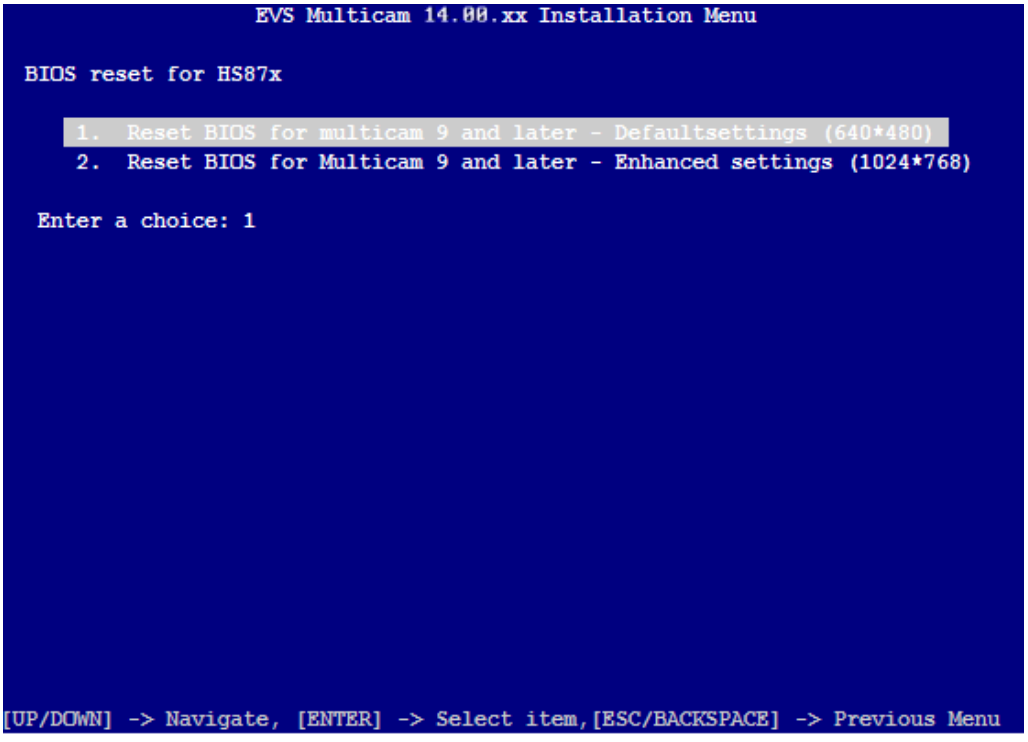
The **Delete All Versions** command clears all versions installed. A warning message asks for confirmation before going ahead.


!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!! Warning !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!
! This operation will erase all the version located in c:\versions
!
!!!!!!!!!!!!!!!!!!!


EVS Multicam 14.[illegible] Startup Menu
XHub Upgrade
1. Upgrade XHub[2] to version 3.03
Enter a choice: 1
[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu

2.5.5. BIOS Reset for HS87x

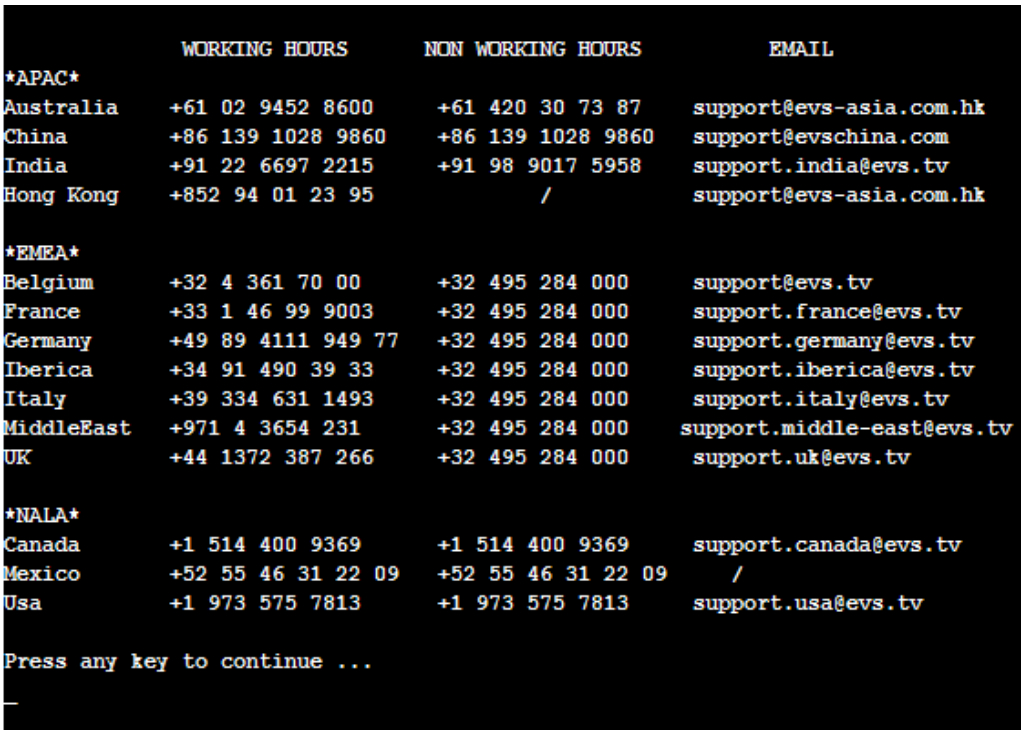
If needed, the Multicam can reset the BIOS of the MTPC. Two choices are available; the option to be selected depends of the hardware used for the VGA.


EVS Multicam 14.00.xx Installation Menu
BIOS reset for HS87x
1. Reset BIOS for multicam 9 and later - Defaultsettings (640*480)
2. Reset BIOS for Multicam 9 and later - Enhanced settings (1024*768)
Enter a choice: 1
[UP/DOWN] -> Navigate, [ENTER] -> Select item,[ESC/BACKSPACE] -> Previous Menu

2.5.6. Exit to DOS

The DOS prompt will allow the user to exit to a traditional DOS prompt that allows performing advanced and complex maintenance and support operations.

2.6. Support & Contact Information



	WORKING HOURS	NON WORKING HOURS	EMAIL
APAC			
Australia	+61 02 9452 8600	+61 420 30 73 87	support@evs-asia.com.hk
China	+86 139 1028 9860	+86 139 1028 9860	support@evschina.com
India	+91 22 6697 2215	+91 98 9017 5958	support.india@evs.tv
Hong Kong	+852 94 01 23 95	/	support@evs-asia.com.hk
EMEA			
Belgium	+32 4 361 70 00	+32 495 284 000	support@evs.tv
France	+33 1 46 99 9003	+32 495 284 000	support.france@evs.tv
Germany	+49 89 4111 949 77	+32 495 284 000	support.germany@evs.tv
Iberica	+34 91 490 39 33	+32 495 284 000	support.iberica@evs.tv
Italy	+39 334 631 1493	+32 495 284 000	support.italy@evs.tv
MiddleEast	+971 4 3654 231	+32 495 284 000	support.middle-east@evs.tv
UK	+44 1372 387 266	+32 495 284 000	support.uk@evs.tv
NALA			
Canada	+1 514 400 9369	+1 514 400 9369	support.canada@evs.tv
Mexico	+52 55 46 31 22 09	+52 55 46 31 22 09	/
Usa	+1 973 575 7813	+1 973 575 7813	support.usa@evs.tv

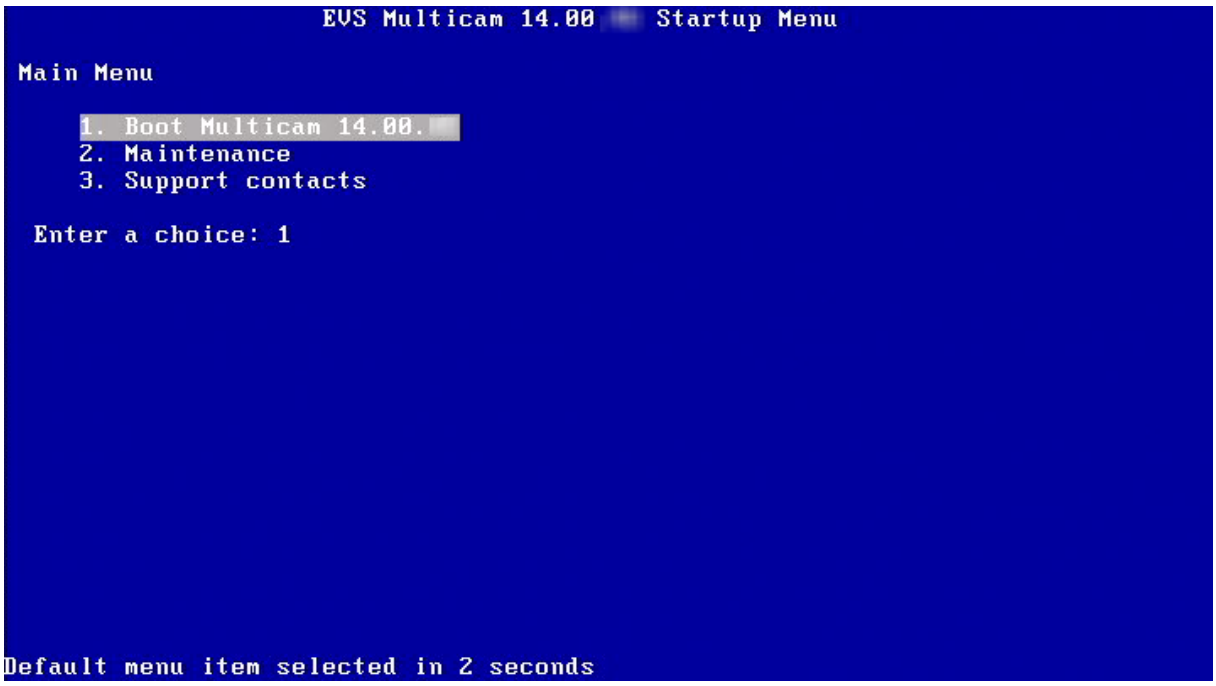
Press any key to continue ...

3. Exploring the Startup Menu

3.1. Overview of the Startup Menu

When booting the EVS server after a Multicam 14 installation, the following startup menu is displayed each time:

- If you want to boot the Multicam 14, highlight option <1> and press **Enter**.
- If you want to enter the Maintenance menu, highlight option <2> and press **Enter**.
- If you want to display contact and support information, highlight option <3> and press **Enter**. See section "Support & Contact Information" on page 14.



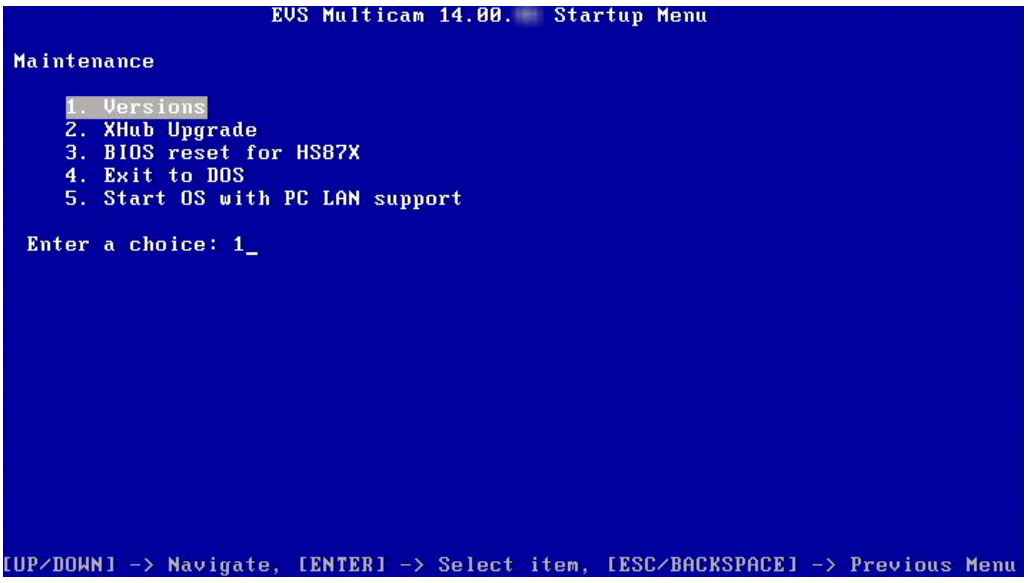
3.2. Boot Multicam 14

If this option is selected, the system boots the version that is currently active. The initial boot menu will proceed after 5 seconds if the user does not press a key.

3.3. Maintenance Menu

3.3.1. Overview of the Maintenance Menu

From the Startup menu, the Maintenance option opens the following Maintenance menu. This menu, which is similar to the Maintenance menu available from the Installation menu, offers different possibilities to maintain the server. The user has the possibility, among others, to manage the version, upgrade an XHub and reset the BIOS.


EVS Multicam 14.00. Startup Menu
Maintenance
1. Versions
2. XHub Upgrade
3. BIOS reset for HS87X
4. Exit to DOS
5. Start OS with PC LAN support
Enter a choice: 1_
[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu

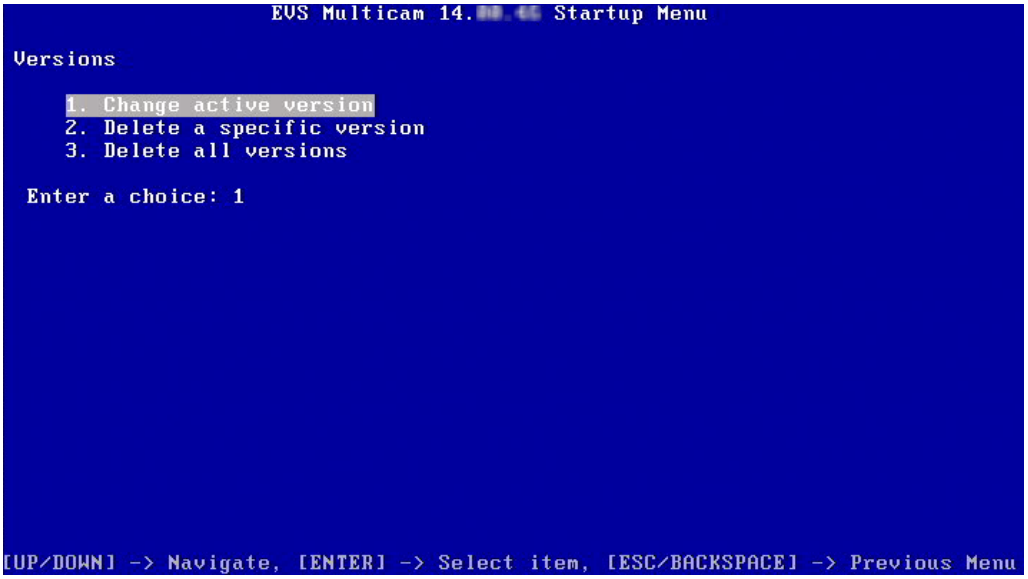
The following table presents the various options and refers to the relevant sections:

Option	Description
Versions	Allows users to delete one or more Multicam versions on the EVS server. See section "Versions" on page 17.
XHub Upgrade	Allows users to upgrade XHub and XHub[2] versions. See section "XHub Upgrade" on page 12.
BIOS reset for HS87X	Allows users to reset the BIOS of the MTPC. See section "BIOS Reset for HS87x" on page 13.
Exit to DOS	Allows users to exit the startup and open a DOS command prompt. See section "Exit to DOS" on page 13.
Start OS with PC LAN Support	Allows users to start the OS, only for the purpose of file transfer via PC LAN. See section "Start OS with PC LAN Support " on page 18

3.3.2. Versions

Introduction

When you select the Versions option from the Maintenance menu, the Version window is displayed. As you can install up to five Multicam versions on the EVS server, you can manage these versions and delete one or more versions if needed. The Version window allows you to manage the Multicam versions installed on the EVS server.


EVS Multicam 14. Startup Menu
Versions
1. Change active version
2. Delete a specific version
3. Delete all versions
Enter a choice: 1
[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu

The following options are offered and explained below:

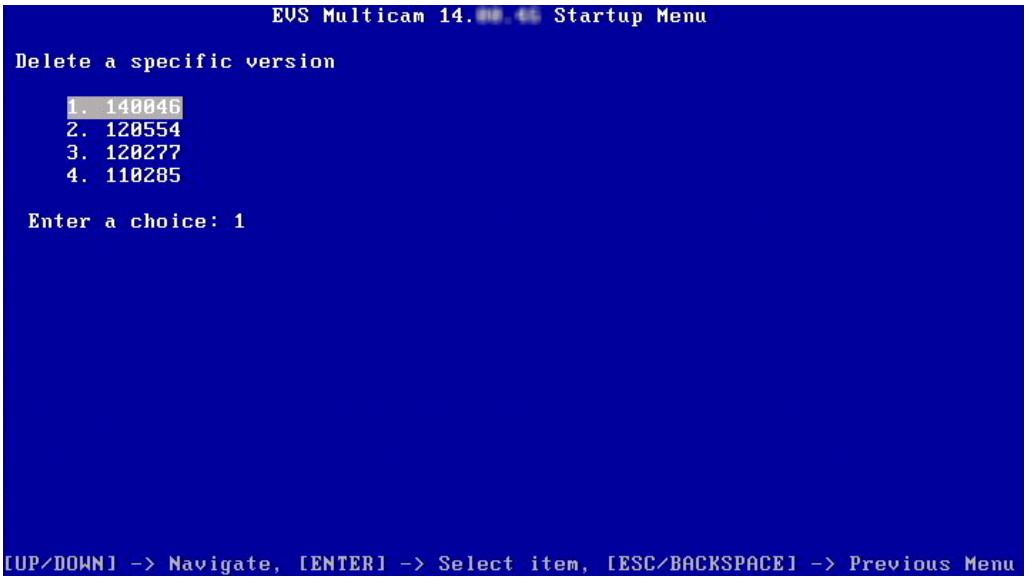
- Change Active Version
- Delete a Specific Version
- Delete all Versions

Highlight the requested option with the Arrow keys, then press **Enter** to either open a secondary menu, or validate the action.

How to Change the Active Version

With this option, you can easily and quickly swap to one of the Multicam versions installed on the EVS server. A quick extraction is done in the background and you can upgrade or downgrade in minutes without using the USB key.

When changing the active Multicam version, a series of warning messages might appear. Due to possible differences in operating system and file management between two Multicam versions, an automatic BIOS update is performed and clearing the video disks is required whenever an upgrade is engaged between incompatible Multicam versions.



How to Delete a Specific Version

See section "Versions" on page 11 in the installation menu.

How to Delete All Versions

See section "Versions" on page 11 in the installation menu.

3.3.3. Start OS with PC LAN Support

This is an advanced maintenance mode, not advised unless you feel comfortable with the server.

This mode allows booting to perform file transfers from the PC LAN, but will block the boot up of the system. This does not allow for defining the PC LAN address that must have been defined previously.

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